

LEARNER CREATIVITY IN FOREIGN LANGUAGE ACHIEVEMENT

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Abstract: Creativity, as an important psychological trait, has not been sufficiently touched by professionals in language teaching to date. Thus the present paper aims at examining the relationship between creativity and foreign language achievement. To this end, a test of creativity was administered to a sample of 272 undergraduate language learning university students in Mashhad, a city in north-eastern Iran. Results from Pearson product-moment correlation showed a significant correlation between learners' creativity and their foreign language achievement as measured by their university GPA. The results of One-way ANOVA also indicated that there are significant differences in the mean academic achievement scores among language learners. Finally, the implications of the results were discussed within a foreign language learning context.

Keywords: Creativity, Foreign language achievement, GPA, English language

INTRODUCTION

The quest for ways of understanding why some English learners are more successful than others has lately turned towards individual differences. Psychologists of education have long been interested in predicting academic achievement, and a plethora of studies were conducted in this regard (e.g., Bratko, Chamorro-Premuzic, & Saks, 2006; Busato, Prins, Elshout, & Hamaker, 2000; Chamorro-Premuzik, & Furnham, 2003; Goh & Moore, 1987; Kiany, 1998; Laidra, Pullmann, & Allik, 2006; Savage, 1962; Willingham, 1974). However, due to the divergent findings of previous research, we may still cast doubt on the extent to which cognitive abilities may affect learners' academic performance. When it comes to creativity, this divergence in findings is even more tangible. The reason, as Plucker, Beghetto, and Dow (2004) state, is that creativity is a 'fuzzy' trait. Therefore, the predictive power of creativity in the prediction of academic success has yet to be replicated, across different contexts, among different participants, and via different instruments.

From a psychological point of view, creativity is an important factor because it provides a framework for the description of an individual, and also specific differences between individuals. These individual differences are important because they can be used to predict future behavior such as academic success (e.g., Naderi, Abdullah, Aizan, Sharir, & Kumar, 2009; Otto, 1998).

Although many people might think that only the ingenious high-achievers are meant to be creative, some researchers (Cropley, 1972; Guilford, 1950; Harrington, Block, & Block, 1983) contend that the fundamental elements of creativity are normally distributed in the population. All children are capable of thinking creatively irrespective of their IQ provided that their parents provide the appropriate climate so that children's creativity can flourish (Fisher, 2005). Therefore, creativity which involves sensitivity to problems, creative fluency of production, ability to come up with novel ideas, flexibility of mind, synthesizing ability, analyzing ability, reorganization or redefinition of organized wholes, a high degree of complexity of the conceptual structure, and evaluation (Guilford, 1950), might be a factor affecting second or foreign language learning. In the present study, thus, the researchers have tried to examine the role of undergraduate EFL learners' creativity in their foreign language achievement.

Theoretical Framework

In the following paragraphs, we will review the concept of creativity as well as the empirical findings concerning the relation of creativity to academic achievement both in general education and in language learning.

As Dörnyei (2005) states, most scholars contend that there is no single definition of creativity. Nevertheless, many scholars have made attempts to understand the nature of creativity, and the ways through which it can be nurtured (e.g., Guilford, 1950; Plucker, Beghetto, & Dow, 2004; Runco, 2004). In addition, many researchers have devised tests to measure creativity (Guilford, 1976; Kirton, 1989; Meeker, 1985; Sternberg, 1997; Torrance, 1988; Urban & Jellen, 1996).

In the realm of education, there is a fair amount of research on the relation of creativity to academic achievement (e.g., Ai, 1999; Atkinson, 2004; Cicirelli, 1965; Feldhusen, Denny, & Condon, 1965; Fortner, 1986; Luftig, 2000; Naderi, Abdullah, Aizan, Sharir, & Kumar, 2009; Palaniappan, 2007; Struthers, Menec, Schonwetter, & Perry, 1996).

Ai (1999), for example, studied the relationship between creativity and academic achievement among a representative sample of 2264 students in Spain, employing three creativity tests as well as teachers' ratings. The results indicated that the creativity scores obtained via teachers' ratings were highly correlated with achievement scores; however, creativity scores obtained via standardized creativity tests were rarely related to achievement. In a similar vein, Atkinson (2004) examined the role of creativity in students' achievement on GCSE examinations. It was found that creativity bore a positive relationship with levels of achievement. Likewise, Naderi, Abdullah, Aizan, Sharir, and Kumar (2009) conducted a study in order to investigate the relationship between creativity and academic achievement among one hundred and fifty three Iranian undergraduate students studying at Malaysian universities. They employed the Khatena-Torrance Creative Perception Inventory (KTCPI) for testing creativity, and used the Cumulative Grade Point Average (CGPA) as a proxy of academic achievement. The results of their study revealed that, together with age and gender, creativity explained 14% of the variance in academic achievement. In an attempt to examine the role of creativity training in competency on writing tasks among students with learning disabilities, Fortner (1986) involved an experimental group in creative thinking activities and compared their results on writing tasks with those of the control group. The results showed significant improvements in the experimental group's written expressions. In another study, Palaniappan (2007) investigated the relationship between creativity and academic achievement among four hundred and ninety-seven students from three secondary schools in Malaysia. The results of the study revealed that creativity was positively related to academic achievement.

In the area of second or foreign language learning, however, creativity has almost been under-researched (Dörnyei, 2005) and somewhat ignored (Albert, 2006). To the researchers' knowledge, there are few studies that take into account the role of creativity in language learning achievement (Albert & Kormos, 2004; Meera & Remya, 2010; Otto, 1998; Sutrisno, 2007). Albert and Kormos (2004), for example, have investigated the role of creativity in learners' performance on oral narrative tasks. Three aspects of creativity, i.e. creative fluency, originality, and flexibility, were taken into account by the researchers. Their study came up with divergent findings: While creative fluency proved to be positively correlated with better performance on the part of learners, originality negatively affected their performance on oral narrative tasks. In another study, Meera and Remya (2010) examined the relationship between creativity and achievement in English language and found the following result: The role of creativity on English achievement was found significant. Moreover, Otto (1998) adapted five subtasks from the

Torrance test of creativity, namely, consequences, unusual uses, common problems, categories, and associations. The results of correlation analysis showed highly significant relationships between creativity and English grades. Finally, Sutrisno (2007) explored the relationship between three hundred and twenty-four tenth grade students' creativity and their achievement in learning English in Brebes. The results showed a positive and significant correlation between creativity and scores on the achievement test including reading, vocabulary, and structure.

Purpose of the study

As stated earlier, there are very few studies that consider the role of creativity in language learning achievement. Moreover, these studies have come up with divergent findings. In other words, a solid understanding of the role of creativity in language learning achievement has not been obtained to date. Therefore, as a step towards filling this gap, the present study examines the relationship between learners' creativity and their academic achievement in an EFL context. This research, thus, is conducted to find out answers to the following questions:

Q1: Is there any significant relationship between creativity and learners' academic achievement?

Q2: Does creativity influence learners' achievement of a foreign language?

METHODOLOGY

Participants

Two hundred and seventy-two EFL learners participated in this study, including 204 females (75%) and 68 males (25%) between the ages of 18 and 37 ($M= 21.78$, $SD= 3.14$) in Mashhad, a city in north-eastern Iran. All of the participants were undergraduate university students attending three universities in Iran, majoring in Teaching English as a Foreign Language, English Language and Literature, and English Translation.

Instruments

Arjomand Creativity Questionnaire (ACQ)

This questionnaire had been designed and standardized by Arjomand (2003, as cited in Akbari, Sharifi, Hosseini, Sharifi, & Ahghar, 2009) in order to measure the level of creativity in Iran. It comprises 75 five-point Likert-scale items with the following options: very high, high, to some extent, low, and very low. For the scoring of Arjomand Creativity Questionnaire we simply assign values 1, 2, 3, 4, and 5 to options very low, low, to some extent, high, and very high, respectively. Ebrahimi (2004, as cited in Akbari, Sharifi, Hosseini, Sharifi, & Ahghar, 2009) administered the questionnaire to 250 high school male students in Tehran, Iran. The results of factor analysis showed the test enjoys construct validity, and the reliability of the test through split-half method was 0.64. In the present study, Cronbach Alpha estimated a high reliability for the ACQ, i.e., .94.

Procedures

The ACQ was distributed among students from universities of Iran. The administration phase occurred during class hours by prior arrangement with the instructors.

The data gathered from the questionnaire was entered into and processed with SPSS 16 program. For obtaining the internal consistency of the ACQ, the Cronbach Alpha reliability estimate was employed. Descriptive statistics was used to describe the body of data including a sample of 272. To investigate the relationship between learners' creativity and their foreign language achievement, Pearson product-moment correlation was applied to the data. Moreover, the researchers further analyzed the data to see if creativity has any significant role in foreign language

achievement. For this to determine, three subgroups were formed based on the creativity scores. Next, the mean GPA scores of these three groups were compared. One-way ANOVA and Post-Hoc Scheffe test was run to see if there are differences in academic achievement among low, mid, and high creative learners.

RESULTS

5.1 Descriptive statistics

Table 1 summarizes the descriptive results of the ACQ and learners' GPA. As may be seen in the table, creativity enjoys a high reliability, i.e. 0.94.

Table 1: Means and standard deviations of learners' creativity scores and GPA

	N	Min	Max	Mean	SD	Alpha
GPA	272	12	19.90	16.50	1.67	-
Creativity	272	106	371	261.5	39.33	.94

Is there a significant relationship between creativity and foreign language achievement?

The researchers have also tried to examine whether there is any significant relationship between learners' creativity and their academic achievement. Academic achievement was measured in the present study by learners' university GPA. The results found a significant relationship between creativity and learners' GPA ($r = 0.356$, $p < 0.01$), as can be seen in Table 2.

Table 2: Correlations between learners' creativity and their English language achievement

	GPA
Total Creativity	0.356**

** Shows the existence of significant relationship at the level of 0.01

Does creativity influence learners' achievement of a foreign language?

Since the correlation was not much high, we tried to further analyze the data. Therefore, a One-way ANOVA was conducted so that the researchers could compare the influence of creativity on academic achievement among low, mid, and high creative learners. Prior to conducting One-way ANOVA, however, Levene's test, which assesses variance homogeneity in different samples, was employed. As can be seen in Table 3, Levene's test indicated equal variances ($p > 0.05$), hence the appropriateness of conducting a parametric test such as ANOVA.

Table 3: Levene's test of variance homogeneity

Levene Statistic	df1	df2	Sig.
.143	2	269	.867

The results from One-way ANOVA revealed that GPA differed significantly across the three subgroups of creativity: $F(2, 269) = 10.37$, $p < 0.05$. In other words, the main effect of creativity on English language achievement is significant. Table 4 presents the results of One-way ANOVA for low, mid, and high creativity levels and GPA.

Table 4: The results of One-way ANOVA for levels of creativity and GPA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	54.123	2	27.062	10.373	.000
Within Groups	701.755	269	2.609		
Total	755.878	271			

In the light of the above findings, the researchers used a post hoc comparison of means in order to locate the differences among means. To this end, Scheffe test, which allows very powerful testing of grouped means against other grouped means, was used. The results of the post-hoc Scheffe test indicated that, at the level of 0.05, there was no significant difference between the GPA scores of the two low and mid groups, but the difference between the GPA score of the high group and those of the two other groups was significant; the GPA score of the high group was greater than those of the mid and low groups (Table 5).

Table 5: The results of Post-Hoc Scheffe test for GPA

	N	Subset for alpha = .05	
		1	2
low	90	15.9968	
mid	91	16.4368	
high	91		17.0835
Sig.		.188	1.000

DISCUSSION

After conducting the correlation analysis, it was found that creativity bore a significant relationship with English achievement as measured by learners' university GPA. Moreover, the results of One-way ANOVA and Post-Hoc Scheffe test revealed that the difference between the GPA score of the high creative group and those of the two other groups was significant. Put it another way, the high creative group enjoyed higher achievement grades than the mid and low creative counterparts. These findings are similar to those found in other studies in which creativity proved to be an important correlate of academic achievement (Ai, 1999; Atkinson, 2004; Fortner, 1986; Naderi, Abdullah,

Aizan, Sharir, & Kumar, 2009; Palaniappan, 2007), and quite in line with Otto (1998) and Sutrisno's (2007) hypothesis that there is a direct relationship between creativity and English language learning.

The present study has some useful implications for classroom instruction. Based on the above findings, there is a need for scrupulous, calculated and conscious effort on the part of English teachers as well as learners' parents to provide learners the conditions for the development of creative abilities (Meera & Remya, 2010). To develop creativity, the classroom environment should contain a variety of materials and encourage lots of different experiences. English teachers are recommended to help foreign language learners increase their creativity. Otto (1998) suggests that teachers and lesson planning practitioners should employ a variety of tasks that differ in the level of creativity required. This can also be accomplished by giving learners the chance to ask questions, hold discussions, and try to help learners solve their problems in English through exploration. Teachers may also be trained how to ask novel or unexpected questions which do require some improvisation on the learners' part. Furthermore, if we believe that creativity can be developed (Russo, 2004; Su, 2009), we need some stimulus such as drawing, brainstorming, designing, wordplay, stories, games, and puzzles (Fisher, 2005).

However, in order to achieve the desired goals, care should be taken by teachers to provide other marginal, yet pivotal, conditions. According to Carl Rogers, learners need two conditions to be creative: Psychological safety and psychological freedom. Psychological safety encompasses three processes: Accepting the learner as an individual, avoiding external evaluation while encouraging self-evaluation, and empathizing with the learner, trying to see the world from his/her perspectives. Psychological freedom fosters learners' creativity by permitting the freedom of expression (as cited in Fisher, 2005, p. 28). Divergent thinking has been found to be highly related to creativity (Guilford, 1950, 1959). Therefore, if creativity is to be developed by curriculum developers in educational settings through permitting freedom of speech, special care should be taken by teachers because enhancing creativity via the encouragement of divergent thinking, distancing from the classroom norms, and granting learners freedom of speech in every way possible may disturb the classroom environment which itself is often characterized as emphasizing discipline and obedience on the part of learners. Diverging from the classroom norms may be even more evident in foreign language classes where a confluence of cultural, social, biological, personality, contextual, and racial factors are involved.

In this study the relationship between creativity and GPA in EFL classes was examined. Other studies can be conducted to investigate the relationship between creativity and language skills to see whether creativity can account for any success in these skills. Moreover, creativity seems to be of great importance in written and narrative tasks, which can be studied by other researchers to shed more light on the relationship between creativity and language learning.

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